

**NL INDUSTRIES/TARACORP SUPERFUND SITE GROUP
LEED ENVIRONMENTAL, INC.**

**124 Deborah Drive
Reading, PA 19610
Telephone: (610) 670-7310
Telecopy: (610) 670-7311**

August 8, 2002

First Class Mail

Mr. Brad Bradley
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604-3590

**RE: NL Industries/Taracorp Superfund Site; Granite City, Illinois
*Final Remedial Report for Residential Areas and Remote Fill Properties***

Dear Mr. Bradley:

In response to your January 22, 2001 conditional approval letter (copy attached) and on behalf of the NL Industries/Taracorp Superfund Site Group ("Group"), enclosed are three sets of the revised pages to ENTACT, Inc.'s ("ENTACT") October 12, 2000 Final Remedial Report for the Residential Areas and Remote Fill Locations for the NL/Taracorp Superfund Site in Granite City, Illinois. The pages include:

- Revised cover sheet (for the outside of report binder);
- Revised cover sheet (for the inside of report binder);
- Revised page 1, Section 1.0 (to reflect the final number of residential lots completed during remedial activities at the site);
- Revised page 3 (to reflect the final number of residential lots and to change the dates that OHM performed remedial activities at the site); and
- Page 31, Section 9.0 (signed certification statement).

The revised pages have been pre-punched for insertion in the final report.

The Group believes that the submission of these pages will complete ENTACT's final report for the residential areas and remote fill lots.

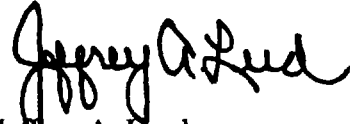


Mr. Brad Bradley
August 8, 2002
Page 2

Please contact this office if additional information or clarification is needed.

Very truly yours,

LEED ENVIRONMENTAL, INC.

A handwritten signature in black ink, appearing to read "Jeffrey A. Leed". The signature is fluid and cursive, with the first name "Jeffrey" being more prominent.

Jeffrey A. Leed
Project Coordinator

attachments

cc: Ms. Sandra Bron - Illinois Environmental Protection Agency
(w/attachments, by first class mail)
Mr. Rich Wood - ENTACT, Inc. (w/attachments, by first class mail)
Technical Committee, NL Industries/Taracorp Superfund Site Group
(w/attachments, by first class mail)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

January 22, 2001

REPLY TO THE ATTENTION OF:

Jeff Leed
Leed Environmental, Inc.
124 Deborah Drive
Reading, PA 19610

Dear Mr. Leed:

The U.S. Environmental Protection Agency (EPA) hereby approves the August 28, 2000 "Final Remedial Report" for the Residential Areas and Remote Fill Locations for the NL Industries Superfund Site in Granite City, Illinois, subject to the following conditions:

1. On Page 1, Section 1.0- the last sentence of this section will be considered valid once the remediation of the few remaining lots has been successfully completed (Spring 2001). This will be memorialized by the required signatures on page 31 of the document.
2. Page 3, Second-to-Last Paragraph, last sentence- "738" is substituted for "Approximately 750", and "1993" is substituted for "1994" in this sentence.

Please submit an amended page 3 and the signed page 31 to me as soon as it is available. If you have any questions concerning this letter, please contact me at (312) 886-4742.

Sincerely,

A handwritten signature in black ink that reads "Brad Bradley". The signature is written in a cursive, flowing style.

Brad Bradley
Remedial Project Manager

cc: Sandra Bron, Illinois EPA

Remedial Action Report

Granite City, Illinois

ENTACT

LEADING

THE

NATION

IN

CUSTOMER

CARE



● Prepared for
NL Industries/Taracorp
Superfund Site Group

● Prepared by
ENTACT, Inc.

● July 25, 2002

**Residential
& Remote
Fill Areas**

Final Remedial Action Report

Granite City, Illinois

- **Prepared for
NL Industries/Taracorp
Superfund Site Group**
- **Prepared by
ENTACT, Inc.**
- **July 25, 2002**

ENTACT

LEADING

THE

NATION

IN

CUSTOMER

CARE

**Residential
& Remote
Fill Areas**

1.0 Introduction

ENTACT has developed this Final Report on behalf of the NL/Taracorp Superfund Site Group (Group) to detail the remedial activities conducted at various residential lots and remote fill locations adjacent to the NL Industries/Taracorp Superfund Site (NL site) in Granite City, Madison, Glen Carbon, and Venice, Illinois. The remedial activities required the removal of lead impacted soil from 770 residential lots, 32 remote fill areas, and the capping of 21 alleys. The soils from the residential lots were classified as RCRA special waste as they exhibited total lead levels greater than 500 parts per million (ppm) and leachable lead levels less than 5.0 mg/L. Soils from the remote fill areas were classified as RCRA special waste (less than 5.0 mg/L TCLP) and D008 hazardous waste (greater than 5.0 mg/L TCLP) depending on sampling results. ENTACT's registered professional engineer and the Group's project coordinator have reviewed this report and concur that the remedial action has been completed in full satisfaction of the requirements of the Consent Decree.

1.1 Scope of Work

The scope of work consisted of the following elements:

- Preparation of the remedial action work plan;
- Preparation of a project Health and Safety Plan (HASP);
- Preparation of a Quality Assurance Project Plan (QAPP);
- Mobilization and site preparation;
- Resident coordination;
- Soil sampling and analysis;
- Excavation, transportation, and disposal of impacted soils;
- Paving of alleys;
- Dust suppression;
- Property restoration;
- Personnel and equipment decontamination; and
- Report preparation.

The above scope of work items are described in detail in the following sections of this final report:

Section 2.0 Mobilization and Site Preparation

Section 3.0 Sampling and Analysis

The residential areas were adjacent to the main industrial properties and included approximately 500 acres within the cities of Granite City, Venice, and Madison, Illinois. EPA determined that the residential areas closest to the main industrial properties had the highest levels of lead, which EPA attributed to airborne dust from smelting operations.

3. Remote Fill Areas


The remote fill areas included properties in the Eagle Park Acres subdivisions and various Granite City residential properties, where battery case materials containing lead were used as fill and paving material in low areas. The remote fill areas also included most of the alleys in Venice Township (south and southeast of Madison), Slough Road, and Guy Street Alley in Glen Carbon, Illinois.

In October 1992, Woodward-Clyde Consultants issued a final report providing the results of soil sampling activities in the residential areas. The Army Corps of Engineers (USACE) subsequently tasked OHM Remediation Services Corp. (OHM) to perform removal of lead-contaminated soil at various locations associated with the NL/Taracorp site in Granite City, Venice, and Madison. The initial program contemplated the removal of lead-contaminated soil from approximately seven residential areas. However, EPA subsequently discovered additional areas of contamination during the pre-design field investigation. EPA issued an addendum to the FS that incorporated the findings of the pre-design and supplemental field investigation and expanded the scope of remedial activities. 738 properties were remediated by OHM from 1993 to 1998.

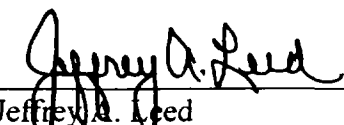
ENTACT mobilized to the site in June of 1998 to begin remedial activities on behalf of the Group. This final report addresses the remedial activities associated with 802 residential lots (770 stack emission and 32 remote fill properties) and 21 alleys not completed by OHM during previous site activities.

9.0 Certification

"To the best of my knowledge, after thorough investigation, I certify that the information contained in or accompanying this submission is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."



Mark Waxali
Professional Engineer
ENTACT, Inc.



Jeffrey A. Leed
Project Coordinator
NL/Taracorp Superfund Site Group



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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January 22, 2001

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Jeff Leed
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124 Deborah Drive
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Dear Mr. Leed:

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1. On Page 1, Section 1.0- the last sentence of this section will be considered valid once the remediation of the few remaining lots has been successfully completed (Spring 2001). This will be memorialized by the required signatures on page 31 of the document.
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Sincerely,

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Brad Bradley
Remedial Project Manager

cc: Sandra Bron, Illinois EPA